

SECTION 02005

CONTROL OF WORK

PART 1 - GENERAL

1.01 DESCRIPTION OF WORK:

A. Contractor shall provide materials testing (field and laboratory services) and land survey services as required by the specifications or as deemed necessary by CTDEEP.

1.02 RELATED WORK SPECIFIED ELSEWHERE:

A. Section 02000 - General Requirements

1.03 QUALITY CONTROL:

- A. Materials Testing Laboratory: The materials testing laboratory must be approved by CTDEEP. Contractor shall submit the names of at least two qualified materials testing laboratories to CTDEEP, including field testing and office testing unit rates for the various testing services anticipated for this project. CTDEEP will select the firm to be used for the project. If both are rejected for any reason by CTDEEP, the Contractor shall submit two new firms for review.
- B. Qualifications for Materials Testing Laboratory: The materials testing laboratory must have a current license to practice in the State of Connecticut. If requested, the materials testing laboratory shall provide additional qualifications and references to assist CTDEEP in the selection process.
- C. Analytical Testing Laboratory: The analytical testing laboratory must be approved by CTDEEP. Contractor shall submit the names of at least two qualified materials testing laboratories to CTDEEP, including laboratory testing unit rates for the various testing services anticipated for this project. CTDEEP will select the firm to be used for the project. If both are rejected for any reason by CTDEEP, the Contractor shall submit two new firms for review.
- D. Qualifications for Analytical Testing Laboratory: The materials testing laboratory must have a current license to practice in the State of Connecticut. If requested, the materials testing laboratory shall provide additional qualifications and references to assist CTDEEP in the selection process.
- E. Selection of Survey Firm: Contractor shall submit the names of at least two qualified land survey firms to CTDEEP, including field crew and office unit rates for the various services anticipated for this project. CTDEEP will select the firm

to be used for the project. If both are rejected for any reason by CTDEEP, the Contractor shall submit two new firms for review.

- F. Qualifications for Survey Firm: The land survey firm must have a Land Surveyor with a valid State of Connecticut Registered Professional Land Surveyor License in responsible charge of services provided. Survey firm shall have experience and capability to conduct bathymetric surveys. If requested, the land survey firm shall provide additional qualifications and references to assist CTDEEP in the selection process.

PART 2 - PRODUCTS

Not Applicable to this Section.

PART 3 - EXECUTION

3.01 SURVEY:

- A. Approximate property lines only are noted on the plans and work may be in close proximity to these lines. In the event of a question with the adjacent land owner as to the location of the property lines, Contractor shall request authorization from CTDEEP to field establish the property line. CTDEEP may also request property line confirmation and if so, Contractor shall not proceed with the work until such property lines are field defined.
- B. Temporary Benchmark (TBM): The Surveyor shall set a TBM at each Sediment Removal Area on the same datum as shown on the drawings (NAVD 1988).
- C. Pre-Construction Plans & Cross-Sections: The quantities listed in the Contract Documents are estimated from field surveys made for development of the Contract Documents and are to serve as an approximation only. Conditions may have changed since the date of those surveys and actual conditions must be verified by field survey. Prior to commencing sediment excavation from within each Sediment Removal Area, the Contractor shall submit pre-construction plans and cross-sections based upon field survey for review and acceptance by CTDEEP. The cross-sections shall be taken at fifty-foot (50') intervals to be located in the field by CTDEEP. Cross-sections along with plan view plots of survey points shall be plotted at a horizontal scale of one inch equals forty feet (1" = 40') and, for the cross-sections, a vertical scale of one inch equals 4 feet (1" = 4').
- D. Acceptance of Pre-Construction Plans & Cross-Sections: Prior to any excavation of sediments taking place, CTDEEP shall verify and accept in writing, the pre-construction cross-sections as representative of actual field conditions.

- E. Post-Construction Plans & Cross-Sections: At the conclusion of sediment excavation, prior to demobilizing from each Sediment Removal Area, the Contractor shall submit post-construction plans and cross-sections based upon field survey for review and acceptance by CTDEEP. The cross-sections shall be taken at the same fifty-foot (50') intervals as the pre-construction cross sections. Cross-sections along with plan view plots of survey points shall be plotted on the original pre-construction plans and cross sections.
- F. Computation of Quantities: The sediment excavation quantity for each Sediment Removal Area will be measured by comparison of the pre-construction and post-construction cross-sections for that area. The volume of excavated sediment will be calculated by the method of "Average End Areas". Excavation beyond the limits indicated by the spot grades shown on the plans shall not be measured for payment unless there is written approval by CTDEEP.
- G. Horizontal Control: The Surveyor shall establish horizontal control acceptable to CTDEEP for each area to be measured for payment under Section 2230 – Vegetation Control.
- H. Post-Construction Areas for Section 02230 – Vegetation Control: At the conclusion of clearing operations for each area designated for Vegetation Control, the Contractor shall submit post-construction plans and areas based upon field survey for review and acceptance by CTDEEP. The areas along with plots of survey points shall be plotted on the original pre-construction plans.
- I. Computation of Quantities for Section 02230 – Vegetation Control: The area measured on the horizontal plane of vegetation control will be calculated by the area measured in CAD. Clearing beyond the limits established by CTDEEP prior to the commencement of the work shall not be measured for payment unless there is written approval by CTDEEP.
- J. All other layout work involving land survey services which may be performed by the Contractor or their surveyor is not covered under this section.

3.02 MATERIALS TESTING:

- A. The named materials testing laboratory shall provide all field sampling, transportation, laboratory testing, and field testing as required by the Specifications or as otherwise requested by CTDEEP. Test results shall be delivered to CTDEEP within two days of completion of the testing.

3.03 ANALYTICAL TESTING:

- B. The named analytical testing laboratory shall provide laboratory testing as required by the Specifications or as otherwise requested by CTDEEP. Test

results shall be delivered to CTDEEP within two days of completion of the testing.

3.04 CONTRACTOR COORDINATION:

- A. The Contractor shall provide complete coordination and cooperate in all manners to assist the survey and testing services.

PART 4 - COMPENSATION

4.01 METHOD OF MEASUREMENT:

- A. The work required under this Section will be measured for payment based on the actual invoiced cost to the Contractor. Contractor shall pay out of pocket cost and shall not be allowed to mark-up survey and testing costs for overhead, profit, or any other purpose. Total payments will not exceed the allowance amount specified in Paragraph 4.03.

4.02 BASIS OF PAYMENT:

- A. The work required under this Section will be paid for at the actual invoiced cost to the Contractor. This cost shall include all equipment, fuel, tools, transportation and labor incidental thereto, up to the specified allowance amount unless otherwise directed by CTDEEP. Invoices submitted to CTDEEP for payment for survey and testing services shall include copies of all invoices submitted to the Contractor. Contractor shall pay out of pocket cost and shall not be allowed to mark-up survey and testing costs for overhead, profit, or any other purpose.

4.03 PAYMENT ITEM:

<u>Pay Item</u>	<u>Description</u>	<u>Pay Unit</u>
02005-1	Control of Work	Up to the Allowance Amount of \$50,000.

***** END OF SECTION *****